

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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OTHER : ☐																					

151000

Monday, September 12, 2016 9:00:14 AM

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

30

Cust Item ID:

Start Date: 9/28/2016 **Start Qty:** 30.00

Required Date: 10/5/2016 **Req'd Qty:** 30.00

30

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

[illegible]

DQA: _____ Date: _____



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Work Order ID 151000

Monday, September 12, 2016 9:00:14 AM

151000

Page 3

Item ID: D3065-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Step Spacer

Start Date: 9/28/2016

Start Qty: 30.00

30

Cust Item ID:

Required Date: 10/5/2016

Req'd Qty: 30.00

30

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Chemical Conversion Coat per QSI005 4.1

0.00

160

HandFinish

Memo

0.05

Hand Finishing

32**32**2016/09/21
BET

161

QC7-Inspect Chemical Conversion Coat

0.00

161

QC

Memo

0.05

Quality Control

32DAS
38
9-89

SEP 7 9 2016

180

Identify as per dwg & Stock Location: _____

0.00

180

Packaging

Memo

0.05

Packaging

LOCATION : GA

32

SEP 2 9 2016

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
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OTHER :					

Work Order ID 151000***151000***

Page 4

Monday, September 12, 2016 9:00:14 AM

Item ID: D3065-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Step Spacer
Start Date: 9/28/2016 Start Qty: 30.00 ***30*** Cust Item ID:
Required Date: 10/5/2016 Req'd Qty: 30.00 ***30*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190							DAS		
QC							21		
Quality Control	Memo	0.50					9-89		SEP 30 2016

DAS SEP 30 2016
21
9-89

DQA: _____ Date: _____



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Picklist Print

Monday, September 12, 2016 9:00:14 AM

Page 1

Work Order ID: 151000

151000

Parent Item: D3065-1

D3065-1

Parent Item Name: Step Spacer

Start Date: 9/28/2016

Required Date: 10/5/2016

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP: C02.11.01 Incorporated D3066-1 IPPKJ/RF
IPP: D06.04.25 Water jet EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040		Purchased		No		100	sf	82.4000	0.1238	3.909474			

M2024T3S 040

2024-T3 .040 sheet

on 16/09/25

Location

Loc Qty

Loc Code

MAT022

82.4

m134532

13

m135032

69.4

4

DQA: _____ Date: _____



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Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : ☐			

DART AEROSPACE LTD		Work Order: 151000
Description: Step Spacer		Part Number: D3065-1
Inspection Dwg: D3065 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**
☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.250	+/-0.010	.254	/		V=0.002	
2.093	+/-0.010	2.096	/			
3.936	+/-0.010	3.939	/			
4.186	+/-0.010	4.192	/			
0.587	+/-0.010	.586	/			
Ø0.128	+0.005/-0.001	Ø.127	/			
R0.125	+/-0.010	.125	/			
3.465	+/-0.010	3.465	/			
Ø1.250	+0.012/-0.001	Ø1.249	/			
0.368	+/-0.010	.370	/			
0.871 (Pitch)	+/-0.005	.873	/			
0.040	+/-0.010	.039	/			

Measured by: <u> DC </u>	Audited by: <u> JAS 38 9-89 </u>	Prototype Approval:
Date: <u> 16/09/25 </u>	Date: <u> SEP 26 2015 </u>	Date:

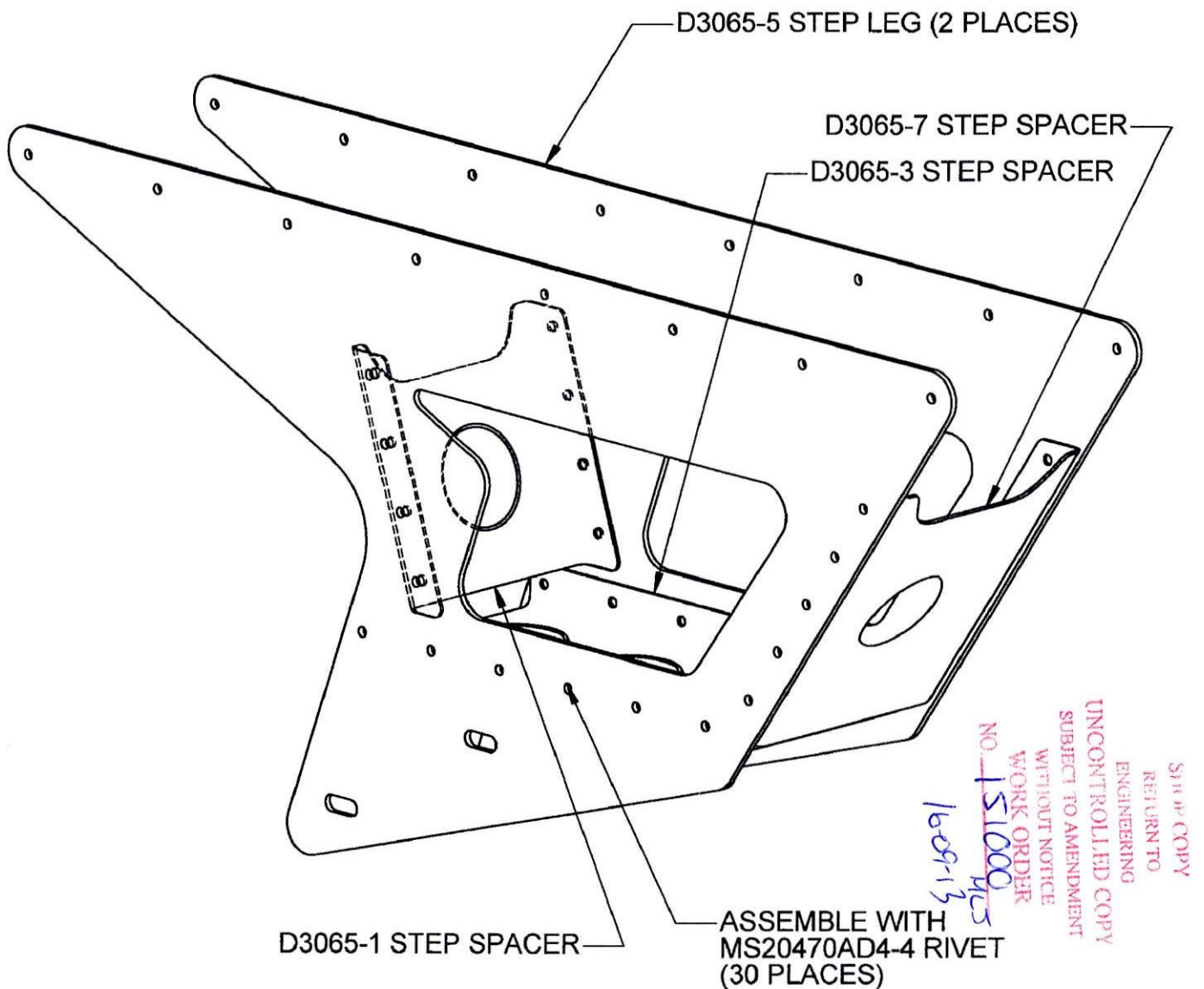
Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue	KJ/RF	
B	06.06.23	Dwg Rev. changed	KJ/JLM	
C	07.02.07	Dimension 0.040 added	KJ/JLM	



DESIGN <i>CP</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 1 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:2
A	02.09.11	NEW ISSUE	
B	06.05.23	ADD 6061-T6 MATERIAL, ADD SLOTS TO D3065-5	

RELEASED

06.06.20 *[Signature]*



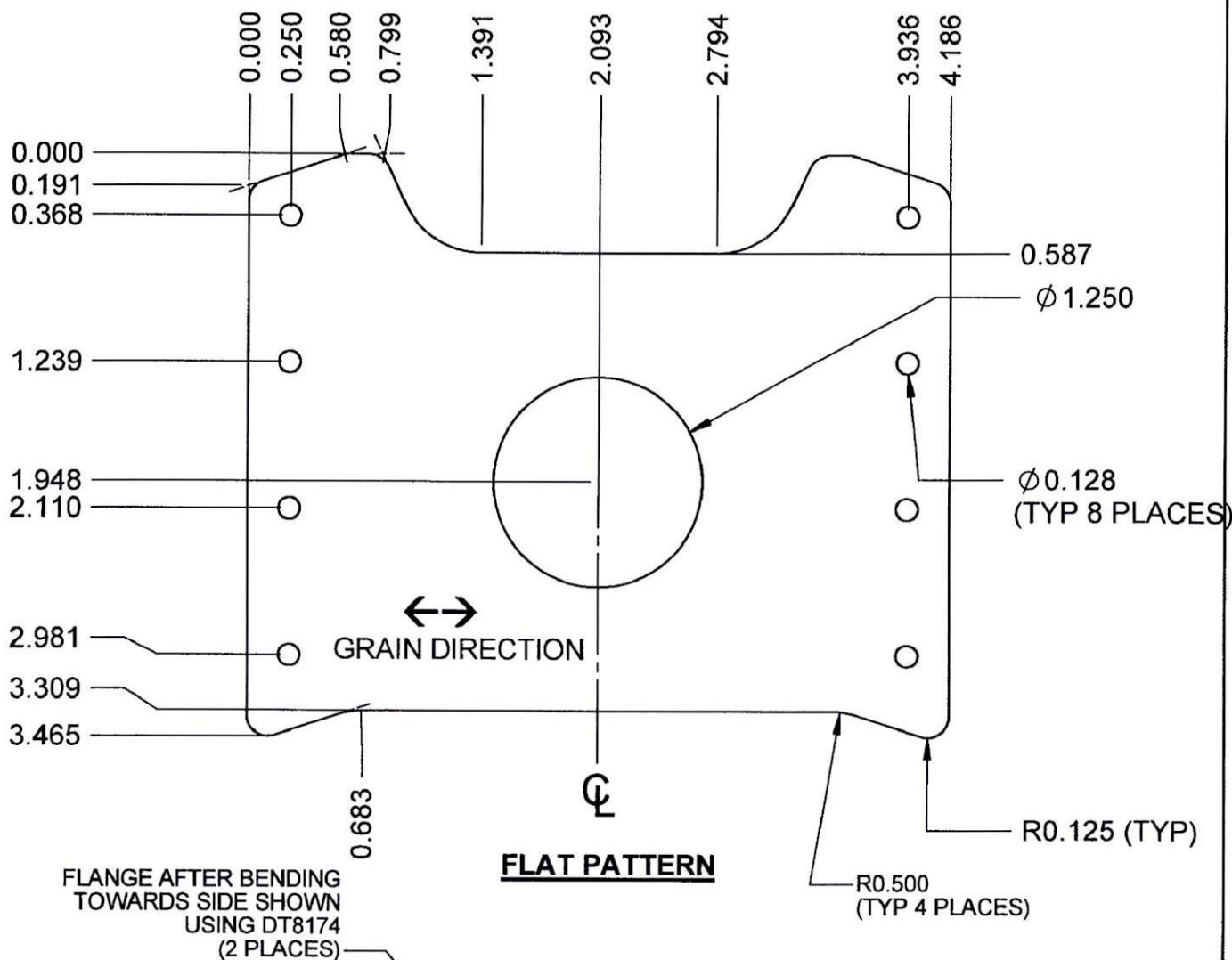
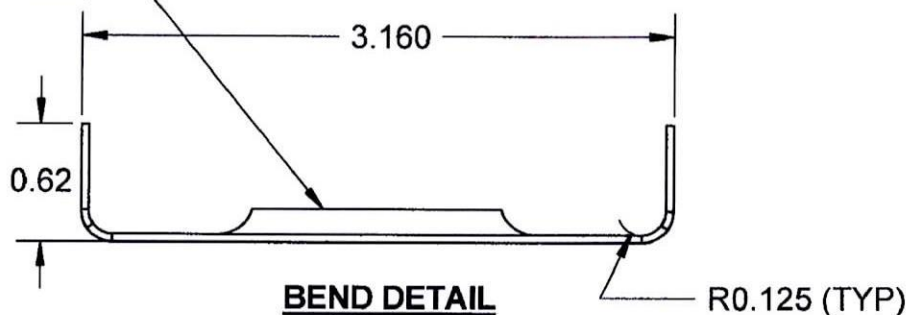
D3065-041 STEP LEG ASSEMBLY

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CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 2 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:1

**RELEASED***cl. de 20***D3065-1 STEP SPACER**

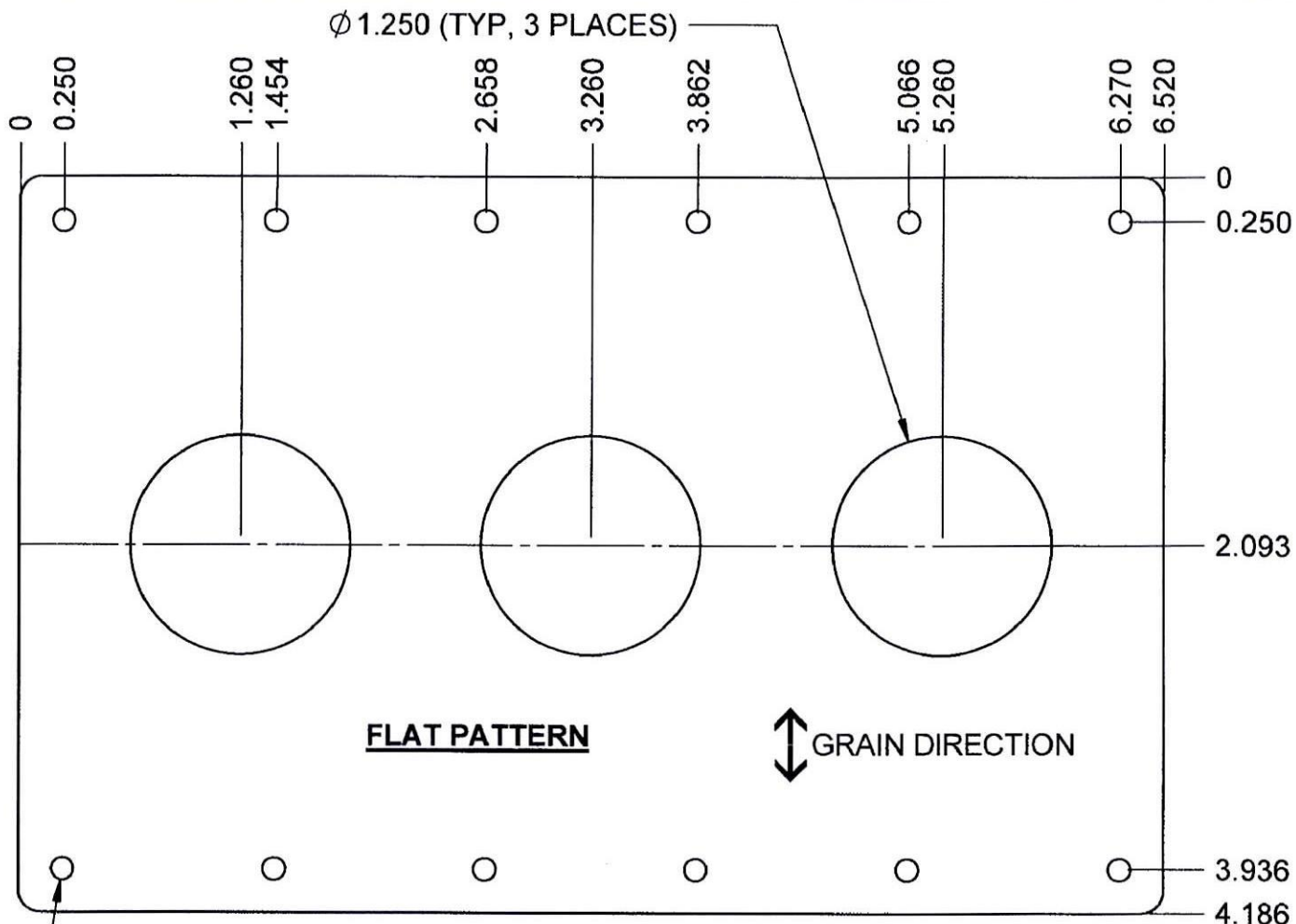
- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SHEET 3 OF 5 SCALE 1:1

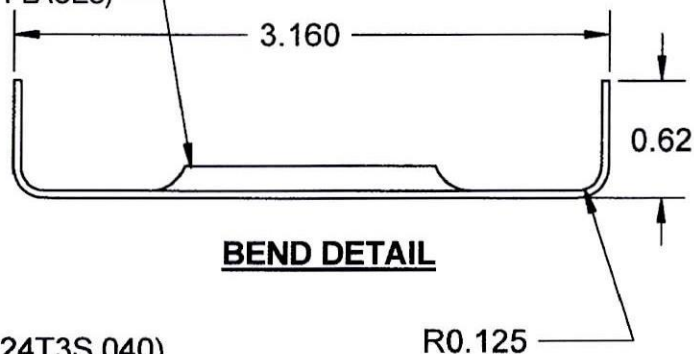


FLANGE AFTER TOWARDS SIDE
SHOWN USING DT8174 (3 PLACES)

Ø 0.129 (TYP, 12 PLACES)

RELEASED

06.05.23



BEND DETAIL

D3065-3 STEP SPACER

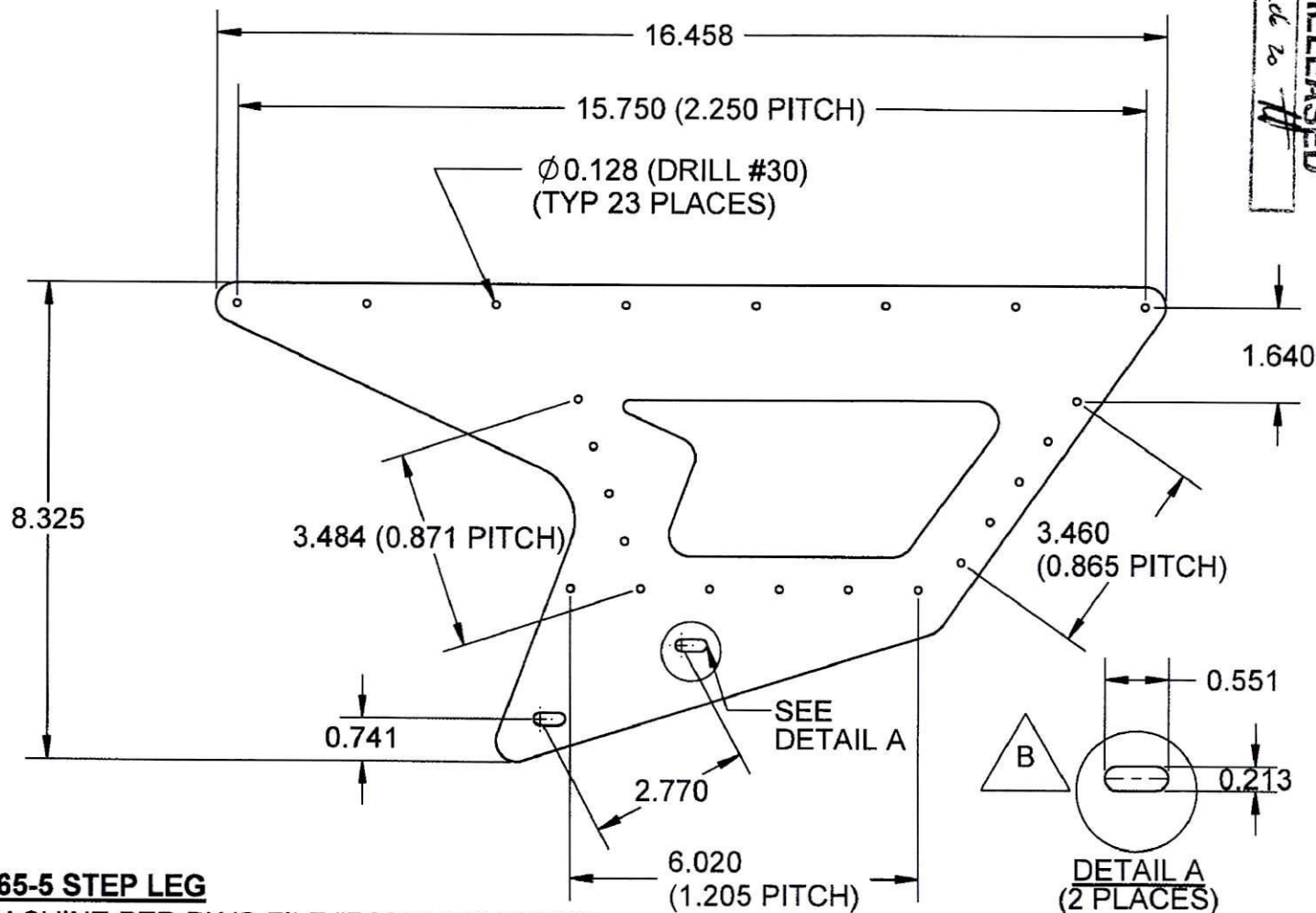
- 1) MATERIAL: 2024-T3 (QQ-A-250/4)
0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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DESIGN	<i>CP</i>	DRAWN BY	<i>C.B.</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>PH</i>	APPROVED	<i>PH</i>	DRAWING NO. D3065
DATE	06.05.23	TITLE	STEP LEG ASSEMBLY	REV. B SHEET 4 OF 5
		SCALE	1:3	

RELEASED
06.06.20**D3065-5 STEP LEG**

- 1) MACHINE PER DWG FILE "D3065-5.SLDPRJT"
- 2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK
(REF DART SPEC M6061T6S.080)
OR
5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080)
- 3) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
3) PART IS SYMMETRIC ABOUT CENTERLINE
4) BREAK ALL SHARP EDGES 0.005 TO 0.010
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES

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